

**KURUMBAPATTI ZOOLOGICAL PARK
SALEM**

**Annual Report for the Year
2018 -19**



**SALEM FOREST DIVISION
TAMIL NADU FOREST DEPARTMENT**



“A Window to Seasonal Tropical Forests”

CONNECT - REJOICE - REVIVE

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1. Report of Officer-in-Charge/ Executive Summary:

Kurumbapatti Zoological Park is the only recognized zoo in the western part of Tamil Nadu, popularly known as “Kongu Region” committed to provide nature education for school children and local populace of Salem and adjoining districts. The zoo is also involved in rescue and rehabilitation of wildlife under Salem Circle of Tamil Nadu Forest Department. It is home to 7 species of mammals, 9 species of birds and 6 species of reptiles totaling to 22 species and 150 specimens. The display collection of the zoo is primarily of native fauna with few exotics, housed in 31 open and covered exhibits/enclosures.

The zoo has an established animal section with a Forest Range Officer aided by a scientific and technical support staff (biologist) for the upkeep of zoological collection. Other primary activities of the zoo are treatment of sick animals & prophylaxis measures for their health and well-being, feed procurement, record keeping, maintenance of fodder bank, development and maintenance of visitor amenities, development and maintenance of animal exhibits, repair and maintenance of vital service and security installments, zoo education and awareness, annual budgeting.

The year had witnessed gradual growth in annual footfall visits (nearly 3 lakhs visitors) and revenue generation had increased by 14% (Rs. 35.66 lakhs). Major milestone in the zoo’s history is renewal of recognition as a “small category zoo” for a period up to 28.12.2019 following monitoring and evaluation carried out in August 2018 by officials of Central Zoo Authority, New Delhi. Major achievement on the developmental front is the works carried out for the creation of a new animal exhibit for Indian gaur, proposed in the animal collection plan. Other notable achievements include improvement of reptiles and birds enclosures, major repair works of outer fencing, creation of lawns & gardens, erection of pictorial signage boards, aesthetic wall paintings, improvement of service road to overhead water tank, provision of visitor amenities such as wash rooms, rest & rain shelter, extension of motorable concrete pavement, concrete ramp access to parking area etc., This year too, the zoo was frequented by many schools and higher academic institutions, forestry college, forest academy throughout the year as part of their curriculum.

“It is a bad plan that admits of no modification - Publilius Syrus”. Admittance of shortcomings and mistakes is a pre-requisite for sustained growth of our zoo organization. Major constraints of the zoo that were identified and as stipulated by CZA for compliance are inadequate housing for existing collection of macaques, python, fox, jackal, monitor lizard, langur and star tortoise, ignorance in not obtaining prior approval for construction and development of exhibits for Schedule I listed species (black buck, white peafowl), keeping of a rehabilitated temple elephant that posed endangerment to life, lack of full-time veterinarian, lack of animal treatment room and basic diagnostic facilities. It was unfortunate that a keeper staff of the zoo met with an accident inside the animal exhibit, but his life was saved thanks to the timely action of our officials.

Therefore, greater emphasis will be laid on following prioritized works in coming year; meeting prescribed standards for animal housing, upkeep and welfare for the existing animal collection, legal approval will be obtained from CZA for modification in any, for the use of black buck & white peafowl exhibits, formalities for shifting of the elephant are under way, renewed proposals have been placed with the State Government for sanction of posts for mandatory staffing pattern of a small zoo and proposal for animal treatment room with basic diagnostic facilities, quality veterinary medicines, partition management of animal exhibits for keeper and animal safety, ensuring record keeping of animals in the standard as mandated by CZA, implementation and documentation of vaccination, deworming, disinfection schedule of animals under the guidance of wildlife trained veterinarians from Arignar Anna Zoological Park, Vandalur, developing master education plan for school children. With these prioritized works to be undertaken in future, the zoo management will attain the standards of a modern zoo. I am extremely thankful to Thiru I. Anwardeen, IFS., Addl.PCCF & Chief Conservator of Forests, Salem Circle for his constant encouragement, and motivating us through sharing his vision for the zoo, advice on master planning and providing resources and other former CCF's of Salem Circle. Heartfelt thanks to all officers & staff of the Zoological Park for making this year an eventful one and Biologist, Thiru. P. Thirumalainathan for his contributions.

A. Periasamy, I.F.S.,
District Forest Officer,
Salem Forest Division, Salem.

C.Kumar, ACF
Assistant Director,
Kurumbapatti Zoological Park, Salem.

2. HISTORY OF THE ZOO:

Kurumbapatti Zoological Park, Salem is a “Small category Zoo” developing under the aegis of Zoo Authority of Tamilnadu (ZAT). The Zoo is managed by Tamil Nadu Forest Department under Salem Forest Division. Located amidst reserve forest in foothills of Shevaroy (Eastern Ghats) the Park is well wooded and offers a forest ambience. The natural vegetation of the area consists of mixed dry deciduous forests & scrubs.

Initially opened to public as a Forest Recreation Centre in the year 1976 by Tamilnadu Forest Department under Salem Circle. Later on, this centre was setup as a small museum in 1981, on **11.5** hectares of reserve forest land. With its rudiment legacy as a public recreation centre this Park has slowly transitioned over a period of four decades, from a menagerie to a small modern zoo, only recently. Existing area of the Zoo is **31.73** ha and vast area of land is available for future expansion.

The Tamil Nadu State Government had constituted a State Zoo Authority known as Zoo Authority of Tamil Nadu (ZAT) on 03.12.2004. It is a registered Society under Tamil Nadu Societies Registration Act, 1975. The Governing Board of ZAT was reconstituted on 06.03.2013 to administer the zoological parks more effectively under G.O. No.23 Environment and Forests. The Order sought to include all zoos & butterfly park managed by Department of Forests under the ambit of ZAT for facilitating development and maintenance of all the zoos in a self-sustaining manner by receiving and utilizing funds from different Government and Non-Government sources. As on 31.03.2018, Kurumbapatti Zoological Park is one of the nine recognized zoos functioning in the State of Tamil Nadu including zoos managed by NGO’s and Civic bodies. This is the only recognized zoo in the western region of Tamil Nadu and the Zoo was granted renewal of recognition by Central Zoo Authority vide Letter.No.19-99/92-CZA (250) (Vol. III) (NS)/067/2019, dated: 09.01.2019 for a period up to 28.09.2019.

3. VISION OF THE ZOO:

“The Vision of the Zoo shall be to serve as an open window to Seasonal Tropical Forests of Peninsular India, partaking in celebration of its rich biodiversity values & campaigning for its conservation.”

4. MISSION OF THE ZOO:

“The Mission of the Zoo is to accomplish thematic display, proper housing, good welfare & better health care for all animals in the collection that denotes celebration of biodiversity values and arouses passion for conserving our natural world (Seasonal Tropical Forests) with an understanding of essentiality to protect biodiversity for maintaining ecological balance.”

5. OBJECTIVES OF THE ZOO:

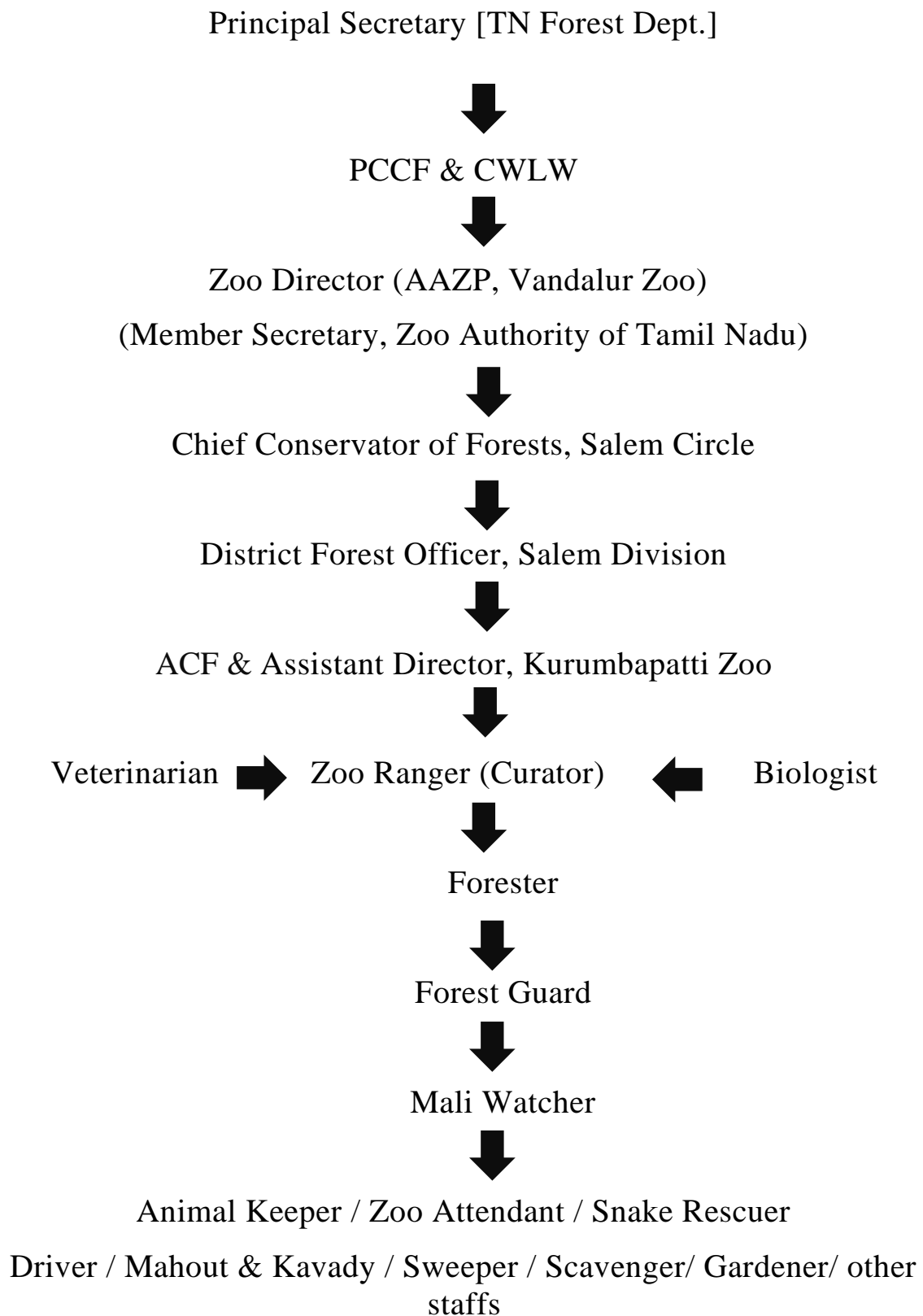
- To conserve & create empathy for threatened wildlife of Peninsular India in general and locally threatened & endemic wildlife of the eco-region in particular.
- To act as conservation breeding centre for endangered fauna of the eco-region and critically endangered & endemic rodent of Shevaroy, Elvira Rat (*Cremnomys elvira*).
- To create awareness for conservation support through education and outreach, foster scientific rationale, seek public support for zoo animal adoption.
- To act as an Interpretative Centre for Nature Education on Tropical Dry Deciduous forests.
- To demonstrate eco-friendly values & provide nature recreation.
- To offset conservation costs of forest dependent communities of the locality/region.
- As a regional platform for disseminating knowledge on ex-situ conservation of wildlife.
- To facilitate research on wild animal health of the region.
- To function as a satellite facility for Arignar Anna Zoological Park, Vandalur.
- Nurture a dedicated team of zoo professionals with up to date skill enhancements.

6. ABOUT US:

S. NO	PARTICULARS	INFORMATION
Basic Information about the Zoo		
1	Name of the Zoo	KURUMBAPATTI ZOOLOGICAL PARK
2	Year of Establishment	1981
3	Address of the Zoo	Kurumbapatti Zoological Park, Near Chettichavadi Village, Salem – 636 012.
4	State	Tamil Nadu
5	Telephone number	0427 - 2415097
6	Fax number	Nil
7	E-mail address	muraliforest1970@gmail.com
8	Website	Nil
9	Distance from nearest	Airport : 25 km via NH 44
		Railway Junction: 13.7 km via Yercaud Rd.
		Bus Stand: 11.8 km
10	Recognition Valid up to	28/09/2019
11	Category of Zoo	Small
12	Area (in Hectares)	31.73 ha.
13	Number of Visitors (Financial Year – 2018-19)	Adult : 2,30,215.
		Children : 47,193.
		Total Indian Visitors: 2,77,408.
		Total Foreigner Visitors: -
		Total Visitors : 2,77,408.

14	Visitors Facilities available in Zoo	R.O Drinking water - 1, Refreshment stall - 1, Resting sheds – 3, benches – 10, Wash room complex - 3, Signages, Lawn, Children Park – 1, Circulation paths, Battery Operated Vehicle, etc.
15	Weekly closure day of the Zoo	Tuesday
Management Personnel of the Zoo		
16	Name with designation of the Officer-in-Charge	Shri. C. Kumar, Assistant Conservator of Forest & Assistant Director.
	Name of the Veterinary Officer	Visiting Vet from AAZP, Vandalur
	Name of the Curator	Shri. M. Muralidharan (Forest Range Officer, Zoo)
	Name of the Biologist	Shri. P. Thirumalainathan, (M.Sc. Wildlife Biology)
	Name of the Education Officer	Shri. P. Thirumalainathan, (M.Sc. Wildlife Biology)
	Name of the Compounder/ Lab assistant	Nil
Owner/ Operator of the Zoo		
17	Name of the Operator	Thiru Shambhu Kallollikar IAS.
18	Address of the Operator	Principal Secretary to Government, Environment and Forest Department, Government of Tamil Nadu, Secretariat, Chennai- 600009.
19	Contact details/ Phone number of Operator	Tel.-044+25671511 Fax No.044+25670040
20	E-mail address of Operator	forsec@tn.gov.in

7. ORGANIZATION CHART:



8. HUMAN RESOURCES:

S. No	Designation	No of sanctioned posts	Names of Incumbent
1	Assistant Director	1	Mr. C. Kumar
2	Forest Ranger	1	Mr. M. Muralidharan
3	Forester	2	Mr. S. Singaravelu Mr. K. Paneerselvam
4	Forest Guard	1	Mr. Sri Ganesh
5	Forest Watcher	1	Vacant
6	Animal Keeper	5	Mr. L. Gunasekaran, Mr. Annadurai, Mr. Sagayam (Two posts vacant)
7	Mali Watcher	3	Mr.Chinnavan
8	Super Numeric Watcher* (* Temporary deployment)	1	Mr. Kannan
9	Driver cum garage collection worker	1	Mr. Santhosh
Total No of sanctioned posts		16	

S. No	Designation	No of temporary posts	Names of Incumbent
1	Horticulturalist (on Adhoc deputation basis)	1	Adhoc staff
2	Biologist cum education officer (on remuneration basis)	1	Mr. P. Thirumalainathan
	Daily Wage Staffs		
3	Temporary Animal Keeper & Snake Rescuer (deployed from South Range)	4	Mr. Madhaiyan, Mr. Yuvarathinam Mr. Raja Mr. Lara
4	Scavenger	2	Mrs. Gomathi Mr. Ambedkar
5	Playground Sweeper	2	Mrs. Pushpa, Mrs. Sasikala
6	Fodder bank watcher	3	Mrs. Latha, Mr. Selvaraj, Mrs. Vijaya
7	Battery Car Operator	1	Mr. Murugesan
8	Driver	2	Mr. Murali, Mr. Nayagam
9	Mahout	1	Mr. Kaliappan
10	Kavady	1	Mr. Palani
11	Gardener/ Mistry	2	Mr. Raman Mr. Dakhinamoorthy
12	Ticket Clerk	1	Mrs. Valli
Total No of temporary posts		21	
Casual wage staffs		10	

Total Manpower available at the Zoo at present is 47.

9. CAPACITY BUILDING OF THE ZOO PERSONNEL:

S. No	Name & designation of Zoo Personnel	Subject matter of training	Period of Training	Name of the institution where training was attended
1	Mr. L. Gunasekaran (Animal keeper) Mr. P. Annadurai (Animal keeper) Mr. Sagayaraj (Animal keeper)	“Training for Zoo Keepers of Tamil Nadu”. jointly organized by Arignar Anna Zoological Park, Vandalur & AIWC, Chennai.	15.10.2018 to 17.10.2018	Advanced Institute for Wildlife Conservation (AIWC), Chennai.
2	Mr. P. Thirumalainathan (Zoo Biologist)	“Middle Management Officers Training Programme” organized by CZA	15.03.2019 to 16.03.2019	Central Zoo Authority, New Delhi.
3	Mr. L. Gunasekaran (Zoo Animal keeper)	“Training programme for Zoo Keepers of Southern Region” organized by Nehru Zoological Park, Hyderabad in collaboration with CZA.	18.03.2019 to 22.03.2019	Nehru Zoological Park, Hyderabad

S. No	Name & designation of Zoo Personnel	Subject matter of Study tour	Date of Study tour Visit	Name of the host institution
1	Mr. M. Muralidharan (Zoo Range Officer) Mr. K. Pannerselvam (Forester) Mr.P. Thirumalainathan (Zoo Biologist) Mr. L. Gunasekaran (Animal Keeper) Mr. R. Santhosh (Driver) Mr. Nayagam (Zoo Attendant) Mrs. G. Gomathi (Zoo Attendant) Mrs. S.Pushpa (Zoo Attendant)	To learn about best management practices in zoo keeping & gain real life experience. Zoo sections explored: Aviary, Carnivore Zone, Primates Zone, Nocturnal house, Live feed unit, Herbivores Zone, Walk-through Aviary, Reptiles Zone, Animal Feed Section, Vermi compost production unit.	27.03.2019	Sri Chamarajendra Zoological Garden, Mysuru (Sponsored by Salem Forest Division)
2	Mr. M. Muralidharan (Zoo Range Officer) Mr. K. Pannerselvam (Forester) Mr. P. Thirumalainathan (Zoo Biologist) Mr. R. Santhosh (Driver) Mr. Nayagam (Zoo Attendant)	To learn about gardening for butterflies, creation of lawns, choice of nectar plants/butterfly attractants for outdoor garden. Park sections explored: Lawns & garden, Indoor conservatory, Nakshatra garden, Children Park, Insect breeding room, nursery, Interpretation center	02.05.2019	Tropical Butterfly Conservatory, Trichy. (Sponsored by Salem Forest Division)

10. ZOO ADVISORY COMMITTEE:

Tentatively proposed zoo management / advisory committee (based on minutes of the meeting held at CCF office, Salem circle held on 30.04.2019)

It has been proposed to constitute a zoo management / advisory committee with following members: -

- CCF, Salem circle
- DFO, Salem forest division
- Assistant Zoo Director, ACF
- Representatives from Nammakal veterinary university
- Forest veterinary officer
- CSR officer of an industry
- District Tourism Officer
- Director, Sathyamangalam Tiger Reserve
- Director, Annamalai Tiger Reserve
- Other reputed individuals (i.e. Senior Doctoral biologist, AAZP)
- Nominee from SACON, Coimbatore.

Other attendees will be: Zoo Curator, KZP, Zoo Veterinarian, KZP, Zoo biologist, KZP

11. HEALTH ADVISORY COMMITTEE:

A health advisory committee will be constituted based on models of AAZP, Vandalur.

12. STATEMENT OF INCOME & EXPENDITURE OF THE ZOO

FINANCIAL REPORT 2018-19:

Source of funding for the management of the Zoo is booked under the following financial budget heads:-

1. Zoo Authority of Tamil Nadu
2. Non-Plan (a. Works, b. Establishment)
3. State Plan Part-I (a. Works, b. Establishment)
4. State Plan Part-II (New & Innovative Works)

ZOO AUTHORITY OF TAMIL NADU

The funds under this category are accrued to the accounts of the zoo, mainly through zoo entry fee collection, user tariff collection for battery operated vehicle, lease rents for vehicles parking. In the last financial year, the funds received in the ZAT accounts was nearly Rs.1.07 crores. Also, this revenue is seen to be increasing at nearly 20@ annual growth.

NON-PLAN-(A) WORKS

The financial allotment under this head is of the order of about Rs. 25.00 Lakhs. The works normally carried out are need based and most essential for the management of the zoo, which include maintenance and upkeep of the animals including feeding charges, maintenance of infrastructure like cages, animal houses, enclosures, visitors facilities, transport, drainage etc.,

NON PLAN-B) ESTABLISHMENT

The pay and allowance being paid under the budget head of “District establishment and Administration” amounting to about Rs.2.05 lakhs per annum.

STATE PLAN – PART 1

a. Works: The allocation under this head over the past years has been very meager ranging from Rs. 15.00 Lakhs per annum. Zoo is an ever developing dynamic resource which should keep pace with the development at National Level. The proposals under this head are all need based and essential for the welfare of zoo animals. Works such as renovation and improvement of enclosures, purchase of equipments, animal exchange programmes, publicity, laying roads, zoo education programmes are included in this scheme, which are approved in the Five-year plan for Forestry Section of Tamil Nadu.

STATE PLAN – PART II – NEW AND INNOVATIVE WORKS

This head includes new works to be executed in the zoo which needs to be sanctioned on priority basis. The quantum of allotment depends on availability of funds in the State budget.

Financial Report for the year 2018-19

Expenditure Details under Non Plan (State Govt. Fund)

Recurring	Budget Approved (in lakhs)	Expenditure (in lakhs)
Feeding	22.00	21.94
Periodical maintenance	2.50	2.49
TOTAL	24.50	24.43

Expenditure Details (State Govt. Fund)

Recurring	Budget Approved (in lakhs)	Expenditure (in lakhs)
Special Health Camp for Elephant	1.38	1.38
TOTAL	1.38	1.38

**Expenditure Details under Zoo Authority of Tamil Nadu (Society) Fund
for the Year 2018-19**

Recurring	Budget Approved (in lakhs)	Expenditure (in lakhs)
Forming of layouts, clearing & leveling for formation of new earthen roads for the identified area where new enclosures are to be setup, providing rest & rain shelters for visitors in the zoo premises, erection of signage boards & direction boards, wages for animal keeper,	31.00	30.80
Construction of Indian gaur, reptiles & birds enclosure, improvement of visitor amenities, providing outer fencing & strengthening of existing fencing, creation of lawns & gardens, relaying of roads & provision of street lights, improvement of water supply & drainage facilities.	107.00	103.387
TOTAL	138.00	134.187

The amount spent by Kurumbapatti Zoological Park during 2018-19 is Rs. 159.99 lakhs for development, special maintenance, maintenance of the Zoo.

13. DAILY FEED SCHEDULE OF ANIMALS

S.No	Species Name	Daily Feed Item	Daily Feed Ration	Frequency of Feeding
1	Macaque_Bonnet	Cabbage	50 g	Once daily
		Banana	4 nos	Once daily
		Pumpkin	100 g	Once daily
		Greens	100 g	Once daily
		Grapes (seedless)	50 g	Once daily
		Bengal gram	15 g	Once daily
		Groundnut	25 g	Once daily
		Bread	4 slices/50 g	Once daily
		Soyabex	20 g	Once daily
		Seasonal ingredients	200 g	Once daily
		Sweet potato/tuber(steamed)	50 g	Once daily
		Egg	1 nos	Mon, Thur, Sat
		Mosambi	125 g	Once daily
		Tomato	40 g	Once daily
2	Macaque_Rhesus	Cabbage	50 g	Once daily
		Banana	4 nos	Once daily
		Pumpkin	100 g	Once daily
		Greens	100 g	Once daily
		Grapes (Seedless)	50 g	Once daily
		Bengal gram	15 g	Once daily

		Groundnut	25 g	Once daily
		Bread	4 slices/50 g	Once daily
		Soyabex	20 g	Once daily
		Seasonal ingredients	200 g	Once daily
		Sweet potato/tuber(steamed)	50 g	Once daily
		Egg	1 nos	Mon, Thur, Sat
		Mosambi	125 g	Once daily
		Tomato	40 g	Once daily
3	Langur_Common	Carrot	50 g	Once daily
		Cabbage	50 g	Once daily
		Banana	150 g	Once daily
		Apple	100 g	Once daily
		Egg	1 nos	Mon, Thur, Sat
		Greens	400 g	Once daily
		Cucumber	50 g	Once daily
		Grapes (Seedless)	100 g	Once daily
		Green gram	50 g	Once daily
		Bengal gram	100 g	Once daily
		Bread	1slices/50 g	Once daily
		Soyabex	20 g	Once daily
		Sweet potato	50 g	Once daily
		Seasonal ingredients	200 g	Once daily

4	Deer_Sambar	Cabbage	250 g	Once daily
		Greens	500 g	Once daily
		Bengal gram	100 g	Once daily
		Salt	20 g	Once daily
		Soyabean meal	250 g	Once daily
		Wheat bran	1500 g	Once daily
		Cattle feed	1500 g	Once daily
		Horse gram	400 g	Once daily
		Groundnut oil cake	100 g	Once daily
		Grass	8000 g	Once daily
		Tree fodder	2000 g	Once daily
		Mineral mixture	25 g	Once daily
5	Deer_Spotted	Cabbage	100 g	Once daily
		Greens	250 g	Once daily
		Bengal gram	50 g	Once daily
		Salt	10 g	Once daily
		Soyabean meal	50 g	Once daily
		Wheat bran	500 g	Once daily
		Cattle feed	500 g	Once daily
		Horse gram	250 g	Once daily
		Grass	3000 g	Once daily
		Green leaves	2000 g	Once daily
		Groundnut oil cake	50 g	Once daily

		Mineral mix	20 g	Once daily
6	Fox _ Bengal	Beef boneless	400 g	weekly 6 days
		Liver	50 g	weekly 6 days
		Sweet potato/tuber(steamed)	50 g	Once weekly
		Seasonal ingredients (fruits)	200 g	Once weekly
7	Jackal	Beef with bone	1000 g	weekly 6 days
		Liver	100 g	weekly 6 days
		Sweet potato/tuber(steamed)	100 g	Once weekly
		Seasonal ingredients(fruits)	400 g	Once weekly
8	Peafowl _ Indian	Cabbage	25 g	Once daily
		Greens	100 g	Once daily
		Onion	25 g	Once daily
		Shell grit	20 g	Once daily
		Bengal gram	50 g	Once daily
		Broiler feed	200 g	Once daily
		Mixed grains	25 g	Once daily
		Groundnut	50 g	Once daily
		Paddy	100 g	Once daily
		Garlic	10 g	Once daily
		Green gram	25 g	Once daily
		Carrot	50 g	Once daily

9	Parrot – Rose-ringed	Carrot	5 g	Once daily
		Banana	10 g	Once daily
		Apple	10 g	Once daily
		Greens	10 g	Once daily
		Shell Grit	10 g	Once daily
		Bengal gram	5 g	Once daily
		Mixed grains	10 g	Once daily
		Groundnut	15 g	Once daily
		Garlic	5 g	Once daily
		Sunflower seeds	5 g	Once daily
		Beans	10 g	Once daily
		Guava	10 g	Once daily
		Bread	10 g	Once daily
		Chilly fruit	5 g	Once daily
		Green gram	5 g	Once daily
10	Parrot – Alexandrine	Carrot	10 g	Once daily
		Banana	10 g	Once daily
		Apple	10 g	Once daily
		Greens	10 g	Once daily
		Shell Grit	20 g	Once daily
		Bengal gram	10 g	Once daily
		Mixed grains	10 g	Once daily
		Groundnut	20 g	Once daily

		Garlic	5 g	Once daily
		Sunflower seeds	10 g	Once daily
		Beans	10 g	Once daily
		Guava	10 g	Once daily
		Bread	25 g	Once daily
		Chilly fruit	5 g	Once daily
		Green gram	10 g	Once daily
11	Parrot _ Plum-headed	Carrot	5 g	Once daily
		Banana	5 g	Once daily
		Apple	5 g	Once daily
		Greens	5 g	Once daily
		Shell Grit	10 g	Once daily
		Bengal gram	5 g	Once daily
		Mixed grains	5 g	Once daily
		Groundnut	15 g	Once daily
		Garlic	5 g	Once daily
		Sunflower seeds	5 g	Once daily
		Beans	5 g	Once daily
		Guava	5 g	Once daily
		Bread	10 g	Once daily
		Chilly fruit	5 g	Once daily
		Green gram	5 g	Once daily

12	Cockatiel	Greens	10 g	Once daily
		Onion	10 g	Once daily
		Shell Grit	4 g	Once daily
		Bengal gram	10 g	Once daily
		Thinai	10 g	Once daily
		Mixed grains	10 g	Once daily
		Green gram	10 g	Once daily
13	Partridge _Grey	Mixed grains	50 g	Once daily
		Bread	25 g	Once daily
		Greens	100 g	Once daily
		Shell Grit	10 g	Once daily
14	Budgerigars	Shell Grit	10 g	Once daily
		Bengal gram	5 g	Once daily
		Thinai	10 g	Once daily
		Greens	10 g	Once daily
15	Pelican_ Grey	Fish	1250 g	Once daily
16	Crocodile_ Mugger	Beef boneless	1000 g	Mon, Thur, Sat
		Fish	500 g	Once weekly
17	Monitor_ lizard	Beef	100 g	Weekly 6 days
		Quail egg	1 pc/ 9 g	Once weekly
18	Python_ Indian	Chicken (live)	1500g	twice a month
19	Tortoise _ Star	Carrot	50 g	Once daily
		Greens	100 g	Once daily

		Tomato	30 g	Once daily
		Cabbage	100 g	Once daily
		Beans	75 g	Once daily
		Cucumber	75 g	Once daily
20	Turtle_ Indian black	Beef boneless	25 g	Once daily
		Tomato	30 g	Once daily
		Beans	75 g	Once daily
		Cucumber	100 g	Once daily
21	Turtle_ Red-eared slider	Beef boneless	25 g	Once daily
		Tomato	30 g	Once daily
		Beans	75 g	Once daily
		Cucumber	100 g	Once daily

14. VACCINATION SCHEDULE OF ANIMALS: Tentative vaccination schedule of animals as approved by District Veterinary Polyclinic, Salem

S.no	Species	Diseases vulnerable to /to be vaccinated for	Name of the Vaccine and dosage/ quantity to be used	Periodicity recommended	Remarks
1	Deer _ Spotted & Deer _ Sambar	Blue Tongue (endemic area) Anthrax (endemic area)	Tetanus Toxoid 1 ml I/M	At birth -	Good handling and restraining facilities are essential during vaccination
2	Macaque_ Bonnet & Macaque_ Rhesus	Tetanus Rabies	Tetanus Toxoid/ Zoetic-equivac ® 1 ml I/M Anti-rabies vaccine	At 6 months of age/ repeated once in 6 months At 3 months of age/ annual vaccination	
3	Fox_ Bengal & Jackal – Golden	Rabies Canine distemper & Parvo virus	Anti-rabies vaccine Canine distemper vaccine	1 st vaccine at 3 months of age/ annual vaccination	Killed vaccine recommended
4	Peafowl – Indian, Francolin_ Grey, Pelican _ Grey	Newcastle disease	Newcastle disease vaccine		Handling may cause stress Vaccination is optional
5	Parrot	Avian PolyomaVirus (APV) disease	APV vaccine	1 st vaccine at 3 months of age	Vaccination is optional
6	All Reptile species	-	-		No routine vaccination recommended

15. DEWORMING SCHEDULE OF ANIMALS: Tentative deworming schedule of animals as approved by District Veterinary Polyclinic, Salem

S.no	Species	Recommended Drug	Remarks
1	Deer – Spotted & Deer – Sambar	Fenbendazole -7.5 mg/ kg body weight (through concentrate feed/ pellet feed)	Deworming be carried out based on faecal testing through routine parasitological examination. Same drug should not be used continuously.
2	Macaque_ – Bonnet , Macaque_ – Rhesus, Langur – Common	Albendazole - 25 mg/kg body weight Fenbendazole - 20 mg/kg body weight Ivermectin - 0.2 mg/kg body weight Levamisole – 5 mg/ kg body weight Praziquantel – 15 - 20 mg/kg body weight	
3	Fox_ Bengal – & Jackal – Golden	-	May follow the same basic principle of domestic dog medication
4	Peafowl – Indian, Francolin_ – Grey, Pelican _ Grey	Fenbendazole (Panacur) - 22 mg/kg body weight P/o	-
5	Parrot, Budgieger,	Albendazole Fenbendazole (Panacur) - 22 mg/kg body weight P/o Praziquantel – Piperazine – for round worms	Deworming be carried out based on faecal testing through routine parasitological examination.
6	Crocodile	Fenbendazole (Panacur) – 25 - 50 mg/kg body weight	Orally possible through freezing food/ pelleted diet Repeat in 15 days followed by once in 6 months

S.no	Species	Recommended Drug	Remarks
7	Turtles & Tortoise Star –	<p>Albendazole – 50 mg/kg body weight</p> <p>Levamisole – 5 to 10 mg/kg body weight SQ</p> <p>Fenbendazole – 25 - 50 mg/kg body weight P/O</p> <p>Metronidazole (Flagyl) – 100 mg/ kg body weight P/O - For coccidia</p> <p>Praziquantel - 25 mg/kg body weight (TID for 1 day & repeated in 2 weeks) - For cestodes & trematodes</p>	<p>Oral administration (PO) repeat in 2 weeks for flukes & nematodes</p> <p>Intracoelmic – every 14 days for two treatments</p> <p>Deworm the animals with alternate drugs once in 3 or 6 months</p>
8	Python	<p>Fenbendazole – 25 - 50 mg/kg body weight P/O</p> <p>Ivermectin – 0.2 mg/kg body weight SQ or P/O, every 10 day for 2 to 4 times</p> <p>Levamisole – 5 to 10 mg/kg body weight SQ</p> <p>Metronidazole (Flagyl) – 25 to 50 mg/ kg body weight P/O</p> <p>Praziquantel – 5 – 8 mg/kg body weight (repeated in 2 weeks) - For cestodes & trematodes</p>	<p>Repeat in 15 days</p> <p>For ecto parasites and nematodes. Do not use for debilitated snakes.</p> <p>Intracoelmic – every 14 days for lung worms. Do not use for debilitated snakes.</p> <p>Repeat every 7 days for 2 to 3 treatments - For coccidian</p> <p>Deworm the animals with alternate drugs once in 3 or 6 months</p>
9	Lizard Monitor –	<p>Albendazole – 50 mg/kg body weight (P/O)</p> <p>Fenbendazole – 50 - 100 mg/kg body weight P/O</p> <p>Ivermectin – 0.2 – 0.4 mg/kg body weight SQ or P/O</p> <p>Metronidazole (Flagyl) – 50 to 100 mg/ kg body weight P/O for coccidian</p> <p>Praziquantel – 8 - 10 mg/kg body weight</p>	<p>Oral administration (PO)</p> <p>Deworm the animals with alternate drugs once in 3 or 6 months</p>

16. DISINFECTION SCHEDULE: Tentative disinfection schedule of animal housings as approved by District Veterinary Polyclinic, Salem

S.no	Species	Type of enclosure	Disinfectant to be used and Method	Remarks
1	Deer _ Spotted & Deer _ Sambar	Open-air Outdoor	Open enclosure: Bleaching powder Indoor housing: Sodium hypochloride (prepare for 2.5 – 3% application)	FMD – Sodium carbonate (washing soda) - (prepare for 4% application)
2	Macaque_ Bonnet & Macaque_ Rhesus, Langur_Common	Indoor & Outdoor	Open enclosure: Bleaching powder Indoor housing: Sodium hypochloride (prepare for 2.5 – 3% application)	
3	Fox_ Bengal & Jackal _ Golden	Open-air Outdoor	Indoor: Routine flaming once in 3 months Vicron-s – Viricidal agent Sodium hypochloride (prepare for 2.5 – 3% application) Open enclosure: Bleaching powder	
4	Peafowl _ Indian, Francolin_ Grey, Pelican _ Grey & Parrot	Indoor & Outdoor	Indoor: Routine flaming once in 3 months Vicron-s – Viricidal agent Sodium hypochloride (prepare for 2.5 – 3% application) Open enclosure: Bleaching powder	
5	All Reptile species	Indoor & Outdoor	Indoor: Routine flaming once in 3 months	

17. HEALTH CHECK-UP OF EMPLOYEES FOR ZOO NOTIC DISEASES:

A system for health Check-up of employees for Zoonotic diseases will be developed in future. At present, annual health camp is conducted at Divisional Forest Office, where employees can receive treatment free of cost.

18. DEVELOPMENT WORKS CARRIED OUT IN THE ZOO

INFRASTRUCTURES DEVELOPED DURING 2018-19

S.No	Nature of works	Works achieved
1	New development	Formed layouts for Guar enclosure
2	New development	New earthen Road formed (gaur enclosure)
3	New development	Fencing constructed for Indian gaur enclosure
4	Renovation	Improvement of reptile enclosure – Abandoned aquatic animal exhibit modified for housing Indian black turtles
5	Renovation	Improvement of bird enclosure – Rodent proofing done for new white peafowl aviary
6	Renovation	Improvement of bird enclosure – Improvement of small bird aviary: service path, escape proofing, double-door entry provided
7	New development	Washroom complex for men and women, constructed near parking area
8	Renovation	Visitor rest shed at Children Park 1 improved
9	New development	RCC ramp access constructed for Parking area
10	New development	Rain and rest shelter constructed at Ticket counter
11	New development	Motorable visitor circulation path constructed to mugger exhibit

S.No	Nature of works	Works achieved
12	Special maintenance	New Fence line constructed with RCC drain holes at 4 vulnerable points prone to damage by flood. Fence line damaged due to bamboo were strengthened
13	Renovation	Water pools inside 2 crocodile exhibits provided with RCC slopes on water pool edges for easy movement of animals
14	New development & Renovation	Lawns and garden newly created at zoo entrance, parking area. Layout for a butterfly nectar garden was created , old garden & lawns were revamped , new collection of garden plants were added
15	New development	Laying of water pipes to new areas achieved
16	Renovation	Revamping Animal models done
17	New development	New signage boards were erected

Works on Indian Guar enclosure



New housing for Indian Pond Turtles



Improvement of Small bird aviary



Rodent proofing for new white peafowl aviary



Improvement of visitor's amenities



Improvement of visitor's amenities



Improvement of Service roads ad Circulation Paths



Art works for wildlife awareness



Repair works of outer fencing



Repair works of outer fencing



Ramp for Crocodile pools



Ramp for Crocodile pools



Beautification and Creation of lawns and garden



Creation of Butterfly Nectar garden



Erection of signage boards



19. EDUCATION AND AWARENESS PROGRAMMES DURING THE YEAR

Educational visits to the Zoo are made by schools as well as academic institutions from near and far, throughout the year. The Zoo is a much sought after place for family groups during weekends, local holidays and summer vacations. Large signage panels on zoo animals describing about each species appearance, behaviour, feed at the zoo and conservation status are put up before each animal exhibit. Most of the signages carry picture of representative animal. The trees inside the zoo are also botanically labelled with some useful plant information. These signages helps in educating our zoo visitors. Environmental awareness is raised through observing/celebrating environment related events at Zoo. During the visit of vocational institutions like Forest Academy, Forest Officials give talks on Zoo management and share experiences to give insights into real-life situations.



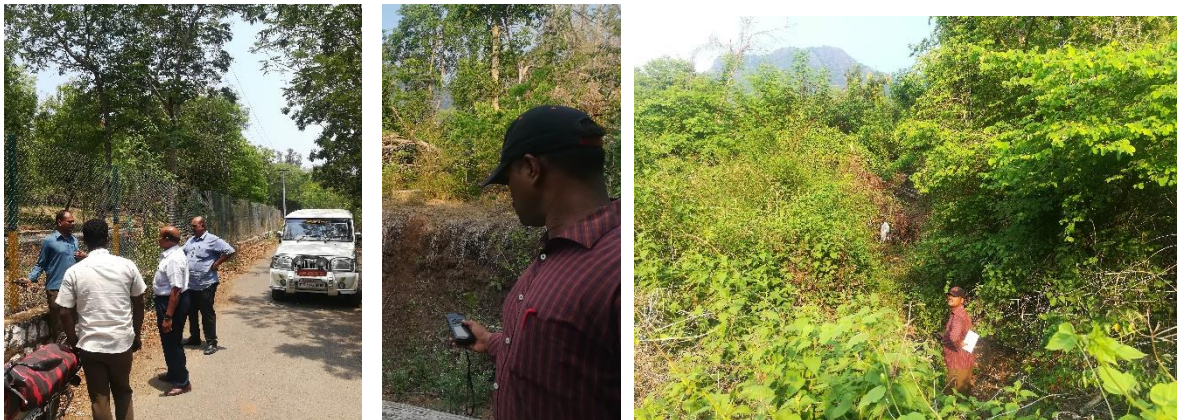
20. IMPORTANT EVENTS AND HAPPENINGS IN THE ZOO:

The Zoo observes/ celebrates days of environmental importance such as wildlife week, nationalistic importance such as Independence and Republic Days. World forestry day of the year was observed at the zoo by Salem forest division.

Monitoring & evaluation visit by CZA



Topographical survey of zoo area



Annual Rejuvenation health camp for “Andal” Elephant





21. SEASONAL SPECIAL ARRANGEMENT FOR UPKEEP OF ANIMALS

During summers & cyclonic weather conditions special arrangements are made for proper upkeep of animals. Sprinkling of water inside animal enclosures, providing water rich fruits and vegetables, vitamin and mineral mix supplementation are added in the diet as part of summer management.

Enrichment of exhibits



22. Research Work carried out and Publications:

No research on captive wildlife. However, free-listing of flora & fauna was carried out this year. Vegetation within the zoo was studied.

FLORA IN THE ZOO:

Kurumbapatti Reserve Forest situated on the Western foothills of Shevaroy, is a typical representation of deciduous forests. Naturally the Kurumbapatti RF belongs to South Deccan Plateau dry deciduous forests ecoregion (a sub type of dry broadleaf forest of India). This region remains in rain shadow of Western Ghats. Among the protected areas of this eco-region, Cauvery Wildlife Sanctuary, in the State of Karnataka is at nearest proximity to Salem (about 88 km).

In the fringes of the reserve, the dry deciduous forest has transitioned to southern tropical thorn scrub type forests, which is characterized by common presence of thorn plants and shrub thickets due to onslaught of ecological disturbances. Since the outlying of the RF are situated in accessible areas, these forests have been subjected to human interference from a very long time. The degradation had stimulated edge effect between easily accessible areas & faintly protected areas of the RF. The Zoo is located in the peripheral area of Kurumbapatti RF and again abuts this RF on all its sides.

Present vegetation within the Park is of mixed deciduous scrub type harboring a mosaic of habitat conditions. The Park has scattered & mixed forms of vegetation which can be somewhat distinguished to be packed wooded stands, open scrub thickets, scrub-woodland to thicket, dense thicket to low scattered shrubs, mature dry bamboo brakes, riparian habitat characterized by seasonal streams.

Ocular estimation of the vegetation community suggests *Peltophorum pterocarpum* (Yellow-flame) as the dominant species of the Park with dense mature stands and high natural regeneration within the developed zone. Over 150 woody species of trees and small trees/shrubs has been documented from within the Park. The dry forest types of the area correspond to 5A/C3 - Southern dry mixed deciduous forest & 5/DS1 - Dry deciduous scrub, whilst the moist formations found on the margins of lower semi-perennial stream correspond to 4E/Rsl - Riparian fringing forest, classification of

Champion and Seth (1968). A few stand of *Syzygium* and *Pongamia* trees on the lower stream bank mark riparian forests elements of the Park.

Southern dry mixed deciduous forest:

This is the degraded stage of the dry mixed deciduous forests characterized by stunted trees and thorny shrubs, usually multi-stemmed from base. The natural composition of the forest is a relic of *Anogeissus - Chloroxylon - Albizia* type of dry forests. It is reported that this type of formation corresponds to rainfall between 600 and 900 mm.

Occurrence of the above vegetation type is evidenced by presence of primary characteristic tree species (about 10 m high) consisting of *Albizia lebbek*, *Anogeissus latifolia*, *Azadirachta indica*, *Bauhinia racemosa*, *Buchanania axillaris*, *Cassia fistula*, *Chloroxylon swietenia*, *Dalbergia paniculata*, *Dendrocalamus strictus*, *Diospyros melanoxylon*, *Dolichandrone atrovirens*, *Limonia acidissima*, *Madhuca longifolia* var. *latifolia*, *Premna tomentosa*, *Santalum album*, *Stereospermum personatum*, *Strychnos potatorum* , *Wrightia tinctoria*.

Characteristic undergrowth of this vegetation type is marked by the presence of *Acacia chundra*, *Argyrei acuneata*, *Canthium dicoccum*, *Carissa spinarum*, *Catunaregam dumetorum*, *Erythroxylon monogynum*, *Rivea hypocrateriformis*, *Securinega leucopyrus*

Characteristic graminaceous cover of the vegetation type is represented by *Heteropogon contortus*.

Dry deciduous: Dense thicket to low scattered shrubs Type

Continued degradation of the dry deciduous woodland forest type has favored growth of thorny species, succeeding to become dense thicket to low scattered shrubs. Of the most common species that have been reported to associate with is vegetation type, representative species documented are *Acacia chundra*, *Cassia auriculata*, *Dichrostachys cinerea*, *Dodonaea viscosa*, *Lantana camara*, *Maytenus emarginata*, *Phoenix pusilla*, *Pterolobium hexapetalum*, *Rhus mysorensis*, *Tarenna asiatica*, *Ziziphus oenoplia*.

Other notable species found associated with this vegetation are:

Introduced Trees: *Ailanthus excelsa*, *Alstonia scholaris*, *Bombax ceiba*, *Ceiba pentandra*, *Casuarina equisetifolia*, *Delonix regia*, *Eucalyptus sp*, *Ficussp*, *Mimusops elengi*, *Muntingia calabura*, *Polyalthia longifolia*, *Phyllanthus emblica*, *Senna siamea*, *Senna spectabilis*, *Terminalia sp.*, *Thespesia populnea*, *Leucaena leucocephala*.

Trees: *Alangium salvifolium*, *Borassus flabellifer*, *Buchanania axillaris*, *Butea monosperma*, *Erythrina variegata*, *Flacourtia indica*, *Morinda pubescens*, *Psydrax dicoccos*, *Pterospermum acerifolium*, *Sapindus emarginatus*, *Semicarpus aracardium*, *Senegalia catechu* , *Streblus asper*, *Tamarindus indica*, *Trema orientalis*, *Ziziphus xylopyrus*, *Zizyphus mauritiana*.

Shrubs: *Allophylus cobbe*, *Benkara malabarica*, *Bergera koenigii*, *Breyniavitis-idaea*, *Calotropis gigantea*, *Capparis sp.*, *Carissa sp.*, *Clausena dentata*, *Commiphora berryi*, *Decalepis hamiltonii*, *Euphorbia nivulia*, *Grewia asiatica*, *Grewia hirsute*, *Gymnosporia senegalensis*, *Jatropha gossypifolia*, *Senna montana*, *Tarenna asiatica*, *Tithonia diversifolia*, *Toddalia asiatica*, *Opuntia stricta*, *Agave sp.*

Grasses: *Oplismenus sp*, *Rhynchelytrum repens*.

Climbers: *Abrus precatorius* *Acacia caesia*, *Acacia torta*, *Acacia pennata*, *Cardiospermum halicacabum*, *Cayratia trifolia*, *Cissampelos pareira*, *Clematis javana*, *Cryptolepis sp.*, *Cuscuta reflexa*, *Dioscorea sp*, *Dregea volubilis*, *Ichnocarpus frutescens*, *Ipomoea sp.*, *Mukia maderaspatana*, *Rhynchosia sp*, *Secamone emetic*, *Solanum seafortianum*, *Solena amplexicaulis*, *Teramnus labialis*, *Wattakaka volubilis*, *Combretum albidum*, *Pristimera indica*, *Tiliacora acuminata*, *Passiflora foetida*.

Herbs: *Abutilon indicum*, *Andrographis sp*, *Asystasia gangetica*, *Blepharis maderaspatensis*, *Dipteracanthus prostratus*, *Justicia sp*, *Aerva lanata*, *Pupalia lappacea*, *Hemidesmus indicus*, *Chromolaena odorata*, *Synedrella nodiflora*, *Senna hirsuta*, *Senna obtusifolia*, *Senna occidentalis*, *Senna tora*, *Gloriosa superba*, *Commelina sp.*, *Ipomoea staphylina*, *Ipomoea obscura*, *Tragia involucrata* ,*Acalypha sp.*, *Alysicarpus sp.*, *Crotalaria sp.*, *Desmodium sp.*, *Hyptis suaveolens*, *Mimosa pudica*, *Indigofera sp.*, *Ocimum americanum*, *Oxalis corniculata*, *Pseudarthria viscida*, *Curculigo orchioides*, *Hybanthus enneaspermus*, *Hibiscus vitifolius*, *Pavonia zeylanica*,

Phyllanthus sp., *Sida sp.*, *Corchorus aestuans*, *Boerhavia sp.*, *Habenaria plantaginea*,
Striga densiflora, *Dentella repens*, *Stachytarpheta jamaicensis*, *Dendrophthoe falcata*

Hedge plants include: *Acalypha wilkesiana* variety 'Inferno', *Duranta erecta*

FAUNA IN THE ZOO:

The Park is home to diverse species of mammals, birds, reptiles, amphibians & fishes and insects, mollusks, annelids & other invertebrates.

Mammals: The Park is home to some of the common native fauna.

Primates: Bonnet macaque and Slender loris

Ungulates: Spotted deer

Rodentia: Palm squirrel, Bandicoot rat

Small volant mammals: Insectivorous bat & Fruit bat

Lagomorpha: Black naped hare

Carnivora: Common mongoose.

Avifauna: So far, 36 species of birds were documented. The Park is a breeding ground for many species of birds.

Caprimulgiformes: Indian nightjar, Asian palm swift

Charadriiformes: Red-wattled lapwing

Columbiformes: Spotted dove

Coraciiformes: Green bee-eater, White-throated kingfisher, Indian roller

Cuculiformes: Greater coucal, Asian koel

Gruiformes: White-breasted waterhen

Passeriformes: Yellow billed babbler, Red-vented bulbul, Red-whiskered bulbul, House crow, Large-billed crow, Black drongo, Greater-racket tailed drongo,

Pale-billed flowerpecker, Indian paradise flycatcher, Tickell's blue flycatcher, Golden-fronted leaf bird, Common myna, Indian robin, Magpie robin, White-rumped shama, Purple sunbird, Purple-rumped sunbird, Common tailor bird, Rufous Treepie

Pelecaniformes: Cattle egret, Indian Pond heron

Phasianidae: Grey francolin, Indian peafowl, Grey junglefowl

Piciformes: Black-rumped flameback

Strigiformes: Jungle Owlet

Reptiles: Bushy jungle scrub with rock boulders is good habitat for lizards, geckos & snakes.

Some of the documented species are Fan-throated lizard, Bronze grass skink, Common wolf snake, Peninsular rock agama, House gecko, Oriental garden lizard, Bengal monitor lizard, Bark gecko, Termite hill gecko, Indian rock python

Streams & waterbody, forest environs are home to a variety of small vertebrae, invertebrate & moisture habitat fauna like frogs, crab, snails, earthworms, arrow worms, beetles & bugs, dragons & damsels, butterflies & moths, cicadas, pill millipedes & many other invertebrates.

The deciduous biotype of the area with a rich diversity of plants including invasive weeds supports a good numbers of butterflies within the Park. 70 species of Butterflies were documented at Kurumbapatti Zoological Park during the year.

23. CONSERVATION BREEDING PROGRAMME OF THE ZOO

The Central Zoo Authority had not assigned any critically endangered species for the purpose of conservation breeding.

24. ANIMAL ACQUISITION/ TRANSFER/ EXCHANGE DURING THE YEAR

Animal acquisition through exchange programme was nil for the year 2018-19.

25. RESCUE AND REHABILITATION OF THE WILD ANIMALS CARRIED OUT

S. No	Species name	Scientific name	No. of animals rescued	Sex	Date of Rescue	Received from	Date of Submission of Report to the CWLW/CA	Action Taken (date and place of rehabilitation)	Reasons for housing in the Zoo
1	Pelican _ Grey	<i>Pelecanus philippensis</i>	1	Unsexed	01.08.18	Shevaroy's South Range, Salem	n/a	Housed in the collection	For pairing
2	Partridge _ Grey	<i>Francolinus pondicerianus</i>	1	Unsexed	15.12.18	Vazhapady Range	n/a	Housed in the collection	For pairing
4	Macaque _ Rhesus	<i>Macaca mulatta</i>	1	Female	14.04.18	Sivagiri Range, Tirunelveli.	n/a	Housed in the collection	For pairing
5	Langur _ Common	<i>Semnopithecus priam</i>	1	Male	25.10.18	Nammakal Range	n/a	Housed in the collection	Hand-raised specimen sent for rehabilitation
6	Fox _ Bengal	<i>Vulpes bengalensis</i>	1	Female	01.08.18	Salem district	n/a	Housed in the collection	Confiscated specimen sent for rehabilitation
7	Fox _ Bengal	<i>Vulpes bengalensis</i>	1	Unsexed	01.08.18	Salem district	n/a	Housed in the collection	Confiscated specimen sent for rehabilitation

8	Jackal _Golden	<i>Canis aureus</i>	1	Unsexed	28.06.18	Shevaroy's South Range, Salem	n/a	Housed in the collection	Confiscated specimen sent for rehabilitation
9	Turtle _ Indian _ Black	<i>Melanochelys trijuga</i>	1	Unsexed	01.08.18	Salem	n/a	Housed in the collection	For pairing
10	Terrapin_ Red-eared	<i>Trachemys scripta</i>	1	Unsexed	01.08.18	Salem	n/a	Housed in the collection	For pairing
11	Python_ Indian Rock	<i>Python molurus</i>	1	Unsexed	01.08.18	Salem district	n/a	Housed in the collection	Confiscated specimen sent for rehabilitation

26. ANNUAL INVENTORY OF ANIMALS:

ABSTRACT ON CAPTIVE ANIMAL COLLECTION				
TAXA	STOCK AS ON			
	01.04.18		31.03.19	
	SPECIES	SPECIMENS	SPECIES	SPECIMENS
MAMMALS	4	34	7	36
BIRDS	9	109	9	98
REPTILES	4	14	6	16
TOTAL	17	157	22	150

ANNUAL INVENTORY OF ANIMALS 2018-19

PART-A

S.No	Species Name	Stock as on 01.04.18				During the Period						Stock as on 31.03.19				
		M	F	U	T	BIRTHS	ACQUISITIONS			DEATHS			M	F	U	T
						U	M	F	U	M	F	U				
SCHEDULE I & II																
BIRDS																
1	Peafowl _ Indian Blue <i>Pavo cristatus</i>	2	7		9		3						5	7		12
	Peafowl _ White <i>Pavo cristatus</i>	3			3								3			3
TOTAL SCHEDULE I & II BIRDS		5	7		12		3						8	7		15
MAMMALS																
1	Macaque _ Bonnet <i>Macaca radiata</i>	1	1		2	1							2	1		3
2	Macaque_Rhesus <i>Macaca mulatta</i>		1		1			1			1			1		1
3	Langur_ Common <i>Semnopithecus priam</i>				0		1						1			1
4	Fox _ Bengal <i>Vulpes bengalensis</i>				0			2						2		2
5	Jackal_Golden <i>Canis aureus</i>				0			1						1		1
TOTAL SCHEDULE I & II MAMMALS		1	2		3	1	1	4			1		3	5		8

S.No	Species Name	Stock as on 01.04.18				During the Period						Stock as on 31.03.19				
		M	F	U	T	BIRTHS	ACQUISITIONS			DEATHS			M	F	U	T
						U	M	F	U	M	F	U				
SCHEDULE I & II																
REPTILES																
1	Monitor Lizard _ Common <i>Varanus bengalensis</i>			1	1										1	1
2	Crocodile _ Marsh/Mugger <i>Crocodylus palustris</i>			6	6						1				5	5
3	Python_ Indian Rock <i>Python molurus</i>				0				1						1	1
TOTAL SCHEDULE I & II REPTILES				7	7				1		1				7	7
TOTAL SCHEDULE I & II		6	9	7	22	1	4	4	1	0	2	7	11	12	10	30

S.No	Species Name	Stock as on 01.04.18				During the Period						Stock as on 31.03.19				
		M	F	U	T	BIRTHS	ACQUISITIONS			DEATHS			M	F	U	T
						U	M	F	U	M	F	U				
PART - B																
SCHEDULE III & IV and EXOTICS																
REPTILES																
1	Pelican_Grey <i>Pelecanus philippensis</i>			2	2				1			1			2	2
2	Partridge_Grey <i>Fracolinus pondicerianus</i>			4	4				1						5	5
3	Cokatiel <i>Nymphicus hollandicus</i>			4	4				1						5	5
4	Parakeet_Rose-ringed <i>Psittacula krameri</i>			27	27										27	27
5	Parakeet_Alexandrine <i>Psittacula eupatria</i>	1	1		2								1	1		2
6	Parakeet_Plum-headed <i>Psittacula cyanocephala</i>	2			2								2			2
7	Pigeon_Rock <i>Columba livia</i>			23	23										10	10
8	Budgerigar <i>Melopsittacus undulatus</i>			30	30										30	30
SCH. III & IV & EXOTICS BIRDS TOTAL		3	1	90	94				3			1	3	1	79	83

S.No	Species Name	Stock as on 01.04.18				During the Period						Stock as on 31.03.19				
		M	F	U	T	BIRTHS	ACQUISITIONS			DEATHS			M	F	U	T
						U	M	F	U	M	F	U				
SCHEDULE III & IV and EXOTICS																
MAMMALS																
1	Deer_ Spotted <i>Axis axis</i>	14	4		18					1			8	7	2	17
2	Deer_Sambar <i>Cervus unicolor</i>	3	10		13						2		4	6	1	11
SCH III & IV MAMMALS TOTAL		17	14		31					1	2		12	13	3	28
REPTILES																
1	Tortoise_Star <i>Geochelone elegans</i>			1	1										1	1
2	Turtle_ Indian Black <i>Melanochelys trijuga</i>			3	3			1							4	4
3	Terrapin_ Red-eared <i>Trachemys scripta</i>			3	3			1							4	4
REPTILES SCH.III, IV & EXOTICS TOTAL				7	7			2							9	9
TOTAL SCH. III & IV & EXOTICS		20	15	97	132			5	1	2	1	15	14	91	120	
GRAND TOTAL		26	24	104	154	1	4	4	6	1	4	8	26	26	101	150

M- Male; F- Female; U- Unsexed; T – Total

27. MORTALITY OF ANIMALS

S.No	Animal Name	Scientific Name	Sex	Date of Death	Reason of death as per post mortem
1	Grey Pelican	<i>Pelecanus philippensis</i>	Male	30.09.18	Shock & dehydration
2	Deer_ Spotted	<i>Axis axis</i>	Male	26.12.18	Shock due to severe internal haemorrhage and pain
4	Deer_Sambar	<i>Cervus unicolor</i>	Female	23.06.18	Cerebral haemorrhage and shock
5	Deer_Sambar	<i>Cervus unicolor</i>	Female	05.01.19	Asphyxia may be due to aspiration
6	Macaque_Rhesus	<i>Macaca mulatta</i>	Female	11.01.19	Septic peritonitis
7	Crocodile_ Mugger	<i>Crocodylus palustris</i>	Female	09.03.19	Haemorrhagic shock

**28. COMPLIANCE WITH CONDITIONS STIPULATED BY THE
CENTRAL ZOO AUTHORITY**

S. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions as submitted by the Officer-in-charge of the Zoo
1. General Requirements					
1	10.1 (3)	The staff parking should be designated at a convenient place near the entry, rather than every staff parking their vehicles near the animal exhibits area or just inside the entry of the Zoo.	Immediately from 09.01.2019		Additional parking area in front of visitor's parking area has been identified and developed for staff vehicle parking.
2	10.1 (3)	The children area should be kept away from the aviary.	Immediately from 09.01.2019		Complied. Play activities have been restricted at Children area near the aviary.
3	10.1 (5)	The Zoo should have boundary wall all around as its being located in the urban area.	Six months from 09.01.2019		To get funds for construction of boundary wall necessary proposals has been sent.
4	10.1 (7)	The nallah passing through the zoo which flows seasonally should be kept debris proof.	Immediately from 09.01.2019		Complied. At present all the debris have been removed and maintained with clean condition.
5	10.1 (7)	It was seen that all waste water after cleaning the enclosure is not treated, neither there is any sewerage system. The waste water from macaque enclosure was seen with full filth and bad smell.	Immediately from 09.01.2019		Complied. Adequate measures have been taken to avoid stagnation of waste water around the enclosure.
6	10.1 (8)	The zoo has acquired an elephant in 2009 from Indira Gandhi Wildlife Sanctuary, Pollachi which has killed 4 persons in the area as well as killed one zoo worker. The said elephant	Immediately from 09.01.2019		The shifting formalities for the elephant is in process. The elephant will be shifted very soon on receipt of orders from the competent authority.

		which has been in danger to life, as it killed four persons is housed along with its mahout and his family are staying inside the zoo premises. The elephant should be shifted to the elephant camp in the State of Tamil nadu immediately.			
7	10.1 (9)	The domestic ducks kept together with pelican should be separated immediately and the domestic ducks should be removed from the zoo.	Immediately from 09.01.2019		Complied.
8	10.1 (9)	The white pigeon should be removed from the zoo.	Immediately from 09.01.2019		Complied.
2. Administrative and staffing pattern					
9	10.2 (2)	The zoo has not yet appointed the full time Veterinary Officer, Biologist cum Education Officer so far. The same should be expedited.	With immediate effect from 09.01.2019		For obtaining government sanction for creation of these posts necessary proposals has been sent from this office. At present One Biologist on contract basis was engaged. Besides arrangements were made with the local Veterinary Officer for attending the related works in the Zoo.
4. Animal housing, display of animals and animal enclosures					
10	10.4 (2)	All aviary at the zoo should be kept rodent proof.	Immediately from 09.01.2019		All new aviaries at the zoo have been made rodent proof, by installing (concealed & over ground) metal wire net along perimeter fence of animal enclosure.
11	10.4 (2)	The chain link mesh joints at animal enclosures and aviary with sharp edges should be avoided and should be placed properly as it may injure the animals housed therein.	Immediately from 09.01.2019		Complied. The joints of chain link mesh have been properly moulded without sharp edges.
12	10.4 (2)	The Zoo should avoid using the plastic pots as drinking water troughs in most of enclosures.	Immediately from 09.01.2019		Complied. All the plastic pots used in the enclosures have been replaced by alternative arrangements.

13	10.4 (2)	The peafowl aviary having its service gate in front should be shifted to the back side.	Immediately from 09.01.2019		Complied. Arrangements were done accordingly, to facilitate service entry.
14	10.4 (2)	The Bengal fox is housed in a cage of 2 sq.mt. Which is basically isolation area for Leopard. The fox should be provided with an appropriate enclosures of the size as prescribed by the CZA.	Six months from 09.01.2019		The foxes have been provided with an additional area of nearly 100 sq.mt. to exhibit natural behaviour & free movement. Further, to obtain Govt. sanction for funds for construction of enclosure for Bengal fox, proposal sent through Annual Work Plan for the Year 2019-2020.
15	10.4 (2)	The jackals are housed in 6 sq.mt. enclosure. The animal enclosure should be provided with the area as prescribed by the CZA.	Six months from 09.01.2019		The jackal has been moved to a much larger space of nearly 100 sq.mt. to exhibit natural behaviour & free movement. Further, to obtain Govt. sanction for funds for construction of enclosure for Jackal, proposal sent through Annual Work Plan for the Year 2019-20.
16	10.4 (2)	The Zoo has not provided adequate signage at fox and jackal enclosures. The same should be expedited.	Immediately from 09.01.2019		Complied. Signage boards have been put up at fox and jackal enclosures.
17	10.4 (2)	All aviaries are provided with service gate in front, the same should be replaced to back or inside.	Three months from 09.01.2019		Complied. Arrangements made for replacing service gate of the aviaries to back.
18	10.4 (2)	The Mugger enclosure should have service entry from the back instead of presently in the front.	Three months from 09.01.2019		Complied
19	10.4 (2)	The water body in mugger enclosure should have a gentle slope/ramp which shall allow the Mugger to easily get into and come out of the water body.	Three months from 09.01.2019		Complied
20	10.4 (2)	In mugger enclosure adequate amount of sand should be provided for basking.	Three months from 09.01.2019		Complied
21	10.4 (2)	The mugger enclosure should be provided with animal house.	Six months from 09.01.2019		It is proposed to construct a new mugger enclosure with animal house, as per CZA

					norms. Since, the existing enclosure will not serve its purpose, the animal house has not been provided.
22	10.4 (2)	The gray francolins should be provided with withdrawn area.	Immediately from 09.01.2019		Complied. Withdrawn area for the francolins had been created using potted plants.
23	10.4 (2)	Turtle should be shifted into large enclosure.	With immediate effect from 26.02.2010		Complied. Turtles have been provided with a large open outdoor enclosure of approximately 100 sq.mt. in area.
24	10.4 (3)	The animal enclosures in the Zoo should be so designed as to fully ensure the safety of the animals and caretakers.	From 23.08.2007		The animal enclosures in the zoo have been designed with local expertise by keeping in mind the safety of the animals as well as caretakers.
25	10.4 (3)	The viewing of all animal enclosures should be restricted to 25% only.	Three months from 09.01.2019		Stage by stage it is being undertaken.
26	10.4 (3)	The Bonnet macaque enclosures size is only 60 sq.mts. The zoo should provide the enclosure of the size as of prescribed by the CZA.	Six months from 09.01.2019		To obtain Govt. sanction for funds for construction of enclosure for Bonnet macaque proposal sent through Annual Work Plan for the Year 2019-20.
27	10.4 (3)	The Rhesus macaque enclosures size is only 25 sq.mts. The zoo should provide the enclosure of the size as of prescribed by the CZA.	Six months from 09.01.2019		To obtain Govt. sanction for funds for construction of enclosure for Rhesus macaque proposal sent through Annual Work Plan for the Year 2019-20.
28	10.4 (3)	The animal house opening towards paddock should have a kuccha ramp for easy climbing of animals.	Immediately from 09.01.2019		Complied. Necessary arrangements by kuccha ramp have been provided wherever required.
29	10.4 (3)	The zoo has acquired an elephant in 2009 from Indira Gandhi Wildlife Sanctuary, Pollachi Tamil Nadu which has killed 4 persons in the area as well as killed one zoo worker. The said elephant which has been in danger to life, as it has killed four persons is housed along with its mahout and his family are staying inside	Immediately from 09.01.2019		Shifting formalities is in progress and the shifting will be completed soon after the receipt of order from the competent authority.

		the zoo premises. The elephant should be shifted to the elephant camp in the State of Tamil nadu immediately.			
30	10.4 (6)	The metalled rod used as perch should be replaced by wood or bamboo or covered by the jute coir immediately.	Immediately from 09.01.2019		Complied
31	10.4 (6)	The macaques are being provided with MS rod inside as a enrichment, the same should be replaced with wooden or bamboo.	Immediately from 09.01.2019		Complied
32	10.4 (6)	The monitor lizards have not been provided any wooden logs or any other enrichment artifacts.	Immediately from 09.01.2019		Complied
33	10.4 (6)	The python enclosure has been provided with metal rod, the same should be replaced by wooden logs of an appropriate size. The enclosure of the Python is also only 2.5 Sq.mt. The Python should be housed in an enclosure of 80 sq.mt. as of prescribed by the CZA.	Immediately from 09.01.2019		To obtain Govt. sanction for funds for construction of enclosure for the python, proposal sent through Annual Work Plan for the Year 2019-20.
34	10.4 (7)	The tortoise and snakes kept next to aviaries should be kept away with screening.	Immediately from 09.01.2019		Complied
35	10.4 (7)	The feed house has been constructed in front of the visitor view at Sambar enclosure, the same should be screened from visitor's view by planting the bamboo or any other suitable trees in front of the feed house.	Immediately from 09.01.2019		Complied. The feed house has been screened temporarily by mesh followed with planting of bamboo.
36	10.4	The zoo has constructed	Immediately		This enclosure will be re-

	(8)	the Blackbuck enclosure without prior approval from CZA. The Zoo should apprise the CZA why necessary action against the Zoo should not be taken for violating of RZR, 2009.	from 09.01.2019		examined with prescription of CZA and accordingly, for alteration a proposal will be submitted for approval of the CZA. Further no animal has been introduced in the enclosure. Hence, there is no violation of any rules.
37	10.4 (8)	The zoo has also constructed an aviary for Peafowl without obtaining the prior approved from CZA.	Immediately from 09.01.2019		Necessary proposal will be submitted to CZA for approved of peafowl aviary.
38	10.4 (9)	All the animal exhibits should be provided with stand-off barriers as per the size prescribed by the CZA.	Three months from 09.01.2019		All the enclosures except few has not been provided with stand of barrier of prescribed size.
39	10.4 (10)	The zoo has provided too many signage at its animal enclosure. The old signages in depleted condition are not removed. The signages should be placed in such a way that does not hinder the visitors view.	Immediately from 09.01.2019		Complied. All the old signage boards have been replaced with new signage boards.
5. Upkeep and health care of animals					
40	10.5 (3)	The Zoo authorities should test the food and water provided to the animals at least once in a year.	Immediately from 09.01.2019		Complied.
41	10.5 (9)	The staff involved with upkeep and healthcare of zoo animals should be screened against zoonotic diseases once every year and those found positive to any communicable disease shall be provided appropriate treatment till they get cured and freed of infection and during the period of such treatment, the infected employees shall be kept away from the responsibility of upkeep and healthcare of animals.	Immediately from 09.01.2019		Sick employees are relived from working with animals till their recovery and their services are used for tasks other than animal keeping.

42	10.5 (10)	The Zoo should maintain the keeper's diary, daily reports, animal history cards and treatment cards, as per standards specified by the Central Zoo Authority.	Immediately from 09.01.2019		Efforts made for maintaining all records.
6. Veterinary & Infrastructure facilities					
43	10.6 (1)	The Zoo should have treatment room with basic diagnostic facilities.	Immediately from 09.01.2019		To obtain Govt. sanction for funds for construction of treatment room, proposal sent through Annual Work Plan for the Year 2019-20.
12. Visitors' facilities					
44	10.12 (1)	The entry of zoo should be made in such manner that physically challenged personnel should be able to visit the zoo smoothly.	Immediately from 09.01.2019		Complied.
Others					
45		The zoo has fluorescent colour to paint the parapet wall of animal exhibits which does not merge with the nature. The same should be replaced with olive green or forest colour.	Immediately from 09.01.2019		This work will be taken up within 2 months after getting funds.

29. LIST OF FREE LIVING WILD ANIMALS WITHIN THE ZOO PREMISES

A. MAMMALS

S.NO	COMMON NAME	SCIENTIFIC NAME
1	Mongoose _ Indian Grey	<i>Herpestes edwardsii</i>
2	Macaque _ Bonnet	<i>Macaca radiata</i>
3	Rat _ Bandicoot	<i>Bandicota sp.</i>
4	Squirrel _ Indian Palm	<i>Funambulus palmarum</i>
5	Deer _ Spotted	<i>Axis axis</i>
6	Flying Fox_ Indian	<i>Pteropus giganteus</i>
7	Loris_ gray slender	<i>Loris lydekkerianus</i>

B. BIRDS

S.NO	COMMON NAME	SCIENTIFIC NAME
1	Tailor bird _ Common	<i>Orthotomus sutorius</i>
2	Sunbird _ Purple	<i>Cinnyris asiaticus</i>
3	Sunbird _ Purple-rumped	<i>Leptocoma zeylonica</i>
4	Robin _ Indian	<i>Copsychus fulicatus</i>
5	Bulbul _ Red-vented	<i>Pycnonotus cafer</i>
6	Bulbul _ Red-whiskered	<i>Pycnonotus jocosus</i>
7	Babbler _ Yellow billed	<i>Turdoides affinis</i>
8	Koel _ Asian	<i>Eudynamys scolopaceus</i>
9	Shama _ White-rumped	<i>Copsychus malabaricus</i>
10	Drongo _ Greater-racket tailed	<i>Dicrurus paradiseus</i>
11	Owlet _ Jungle	<i>Glaucidium radiatum</i>
12	Crow _ House	<i>Corvus splendens</i>
13	Flameback _ Black-rumped	<i>Dinopium benghalense</i>
14	Waterhen _ White-breasted	<i>Amaurornis phoenicurus</i>
15	Heron _ Indian Pond	<i>Ardeola grayii</i>

S.NO	COMMON NAME	SCIENTIFIC NAME
16	Swift _ Asian Palm	<i>Cypsiurus balasiensis</i>
17	Bee-eater _ Green	<i>Merops orientalis</i>
18	Francolin _ Grey	<i>Francolinus pondicerianus</i>
19	Peafowl _ Indian	<i>Pavo cristatus</i>
20	Egret _ Cattle	<i>Bubulcus ibis</i>
21	Lapwing _ Red-wattled	<i>Vanellus indicus</i>
22	Nightjar _ Indian	<i>Caprimulgus asiaticus</i>
23	Roller _ Indian	<i>Coracias benghalensis</i>
24	Drongo _ Black	<i>Dicrurus macrocercus</i>
25	Kingfisher_ White-throated	<i>Halcyon smyrnensis</i>
26	Flycatcher _ Tickell's blue	<i>Cyornis tickelliae</i>
27	Robin _ Magpie	<i>Copsychus saularis</i>
28	Flowerpecker _ Pale-billed	<i>Dicaeum erythrorhynchos</i>
29	Flycatcher _ Indian Paradise	<i>Terpsiphone paradise</i>
30	Eagle _ crested serpent	<i>Spilornis cheela</i>

C. REPTILES

SNO	COMMON NAME	SCIENTIFIC NAME
1	Lizard _ Fan-throated	<i>Sitana ponticeriana</i>
2	Bronze Grass Skink	<i>Eutropis macularia</i>
3	Common Wolf Snake	<i>Lycodon aulicus</i>
4	Agama _ Peninsular Rock	<i>Psammophilus dorsalis</i>
5	Gecko _ House	<i>Hemidactylus frenatus</i>
6	Lizard _ Oriental Garden	<i>Calotes versicolor</i>
7	Gecko _ Termite Hill	<i>Hemidactylus triedrus</i>
8	Python _ Indian Rock	<i>Python molurus</i>



**A White Orange-tip butterfly (*Ixias marianne*) nectaring on flowers of
Indian Snakeweed (*Stachytarpheta indica*) inside the Zoo.**